

**Recommendations from Phase 1 of the
Transmission and Load Planning Taskforce.**

Columbia County, Oregon

Robert Cromwell Consulting LLC



[Current BPA 115kV wooden pole, “H-Frame” transmission towers.]

Executive Summary

In 2024 Columbia County, Oregon received a grant from Business Oregon for semiconductor industrial land planning, largely because the community had just failed to secure a solar/semiconductor manufacturing project, due, in part, to power availability issues. With the funding, in 2025 the County acted to convene a community stakeholder transmission & load planning taskforce to explore the challenges and opportunities for economic development in Columbia County and the role that energy and especially electric supply/load and transmission infrastructure play as a precondition for economic growth in the county. Over the course of 2025 – 26, the Taskforce met and reviewed the historical context for economic development within the county, the various factors affecting the county's ability to be successful in delivering manufacturing investment, industrial economic infusion, and family-wage jobs, and where the community's efforts can best be channeled to plan for, develop, and support future economic growth.

After extensive review of the challenges with creating economic growth within the County the Taskforce members reached consensus that a significant roadblock to future economic development is the lack of additional transmission capacity in the central and south county area, largely within the service territory of Columbia River People's Utility District (CRPUD). The proposed solution is to upgrade a Bonneville Power Administration's (BPA) transmission line entering the central and south county by upgrading (or "up-rating") it from 115kV to 230kV. CRPUD is engaged separately with BPA and Portland General Electric (PGE) as a wholesale power and transmission customer in planning for and studying the proposed up-rated line and is well down the road of seeking to have BPA perform this work on behalf of its customers and the wider community.

The work that will need to be done going forward is not that of CRPUD alone. The communities and local landowners who will be directly impacted by this project will need to understand its importance to the economic future of the county and the family-wage jobs it will support through the end-use business and others that will take advantage of the increased transmission capability. Already begun, this will require *a deep and pro-active level of community engagement during Phase 2 of this effort*, so that all affected understand why this work will need to be done and how it benefits their community for the remainder of this century.

The Taskforce supports responsibly embracing economic growth to provide family wage jobs located within Columbia County. Future work includes providing community forums where education and discussion can occur so that the community has an opportunity to understand and support the infrastructure, decisions, processes, and essential steps required for economic growth in the 21st century. This will be the challenge for local elected

officials, industrial property owners, utilities, and community leaders seeking to bring new investment and family-wage jobs to Columbia County. The Taskforce sincerely hopes that by helping citizens and decision-makers understand the need for expanded transmission, as a precondition for future economic growth, they can in turn restore local employment opportunities in the central and south county. This is an opportunity for Columbia County to chart a proactive course during Phase 2 and differentiate itself from the rest of Oregon through strategic planning and investments in critical infrastructure.

Context for the Taskforce's Discussion of Transmission

Columbia County's history

From the early days of statehood and throughout Columbia County's history its economy was centered on the timber/resource-based industries that were enabled by the rail and river infrastructure that allowed those forest products to reach markets in Portland and around the world. This foundation, along with agriculture, allowed Columbia County to thrive and grow during the 19th and 20th centuries. In addition to shipbuilding and metals fabrication, forest products manufacturers like Boise Cascade, Multnomah Plywood, Friesen Lumber, Armstrong Industries, Crown Zellerbach and others provided the industrial and economic base and family-wage jobs that supported generations of Oregonians who were born, grew up, and raised their families within the county. In addition to the direct jobs, these businesses provided the tax base to support local schools, and infrastructure like roads, water and sewer treatment, as well as supporting community groups and events. Over the last half century, this economic foundation has been eroded due to national, state and local economic trends and regulations that have substantially reduced or eliminated these employers.

Where we are today

A majority of the county's workforce now commutes out of the county for work, taking the tax base associated with their employment with them to other counties, in particular the metro-Portland area. Similarly, local retailers have suffered as folks working out of town do their shopping there as well. Out-migration of people in their twenties and thirties who seek educational and employment opportunities outside the county continue to hollow out the community and the tax base local governments rely upon. This transition has left Columbia County and its local governments struggling to meet increasing demands for services with declining tax revenues. The consequences of these dynamics are directly impacting all communities within the County. It is also important for the community to understand that even with growth in housing, without a similar growth in family-wage jobs, the economic foundation of the county will continue to regress (putting ever-heavier burden on residents)

and further stress the already tenuous economics of local governments providing services within the county.

Elected and community leaders across the county have been working to address this crisis by making deliberate investments in “main street” and small business issues for the cities of Scappoose, St. Helens, Clatskanie, Vernonia, and Rainier as well as investing in tourism. They have also sought to attract new investments in the county from manufacturing businesses across a diverse array of industries.

It should also be noted that in recent years several potential industrial employers have considered locating their businesses in Columbia County and have ultimately decided, in part, not to do so given the uncertainty around power supply and the timing of transmission reinforcements required to deliver that power.

Columbia County Transmission Taskforce

In 2024 Business Oregon facilitated a state grant to support investigation into whether additional electric transmission was needed to support modern day industrial site and economic development and, ultimately, deliver a stronger industrial base in the economy, including family-wage jobs to the communities of Columbia County. The Taskforce was convened at the end of 2025 and began working through issues ranging from the need for transmission, the types of industrial-scale businesses and electrical loads that have been and may seek to locate in the county, including semiconductor, cleantech manufacturing, and data centers.

The taskforce was comprised of current and former elected officials, representatives from CRPUD, West Oregon Electric Cooperative (WOEC), PGE and Clatskanie PUD (Clatskanie); as well as other community leaders deeply involved in bringing new manufacturing jobs to the county. Columbia County Taskforce members included: Casey Garrett, County Commissioner; Sean Clark, Port of Columbia; Paul Vogel, Columbia Economic Team; Joseph Backus, Mayor of Scappoose; Betsy Johnson, State Senator (ret.); Michael Sykes, General Manager, CRPUD; Brandon Staehely, CRPUD; Rob Marinai, Restorcap; Billi Kohler, General Manager WOEC; Andy Larson, WOEC; Nate Stice, Regional Solutions office of the Governor; Melanie Olson, Business Oregon; Marc Farmer, General Manager, Clatskanie PUD; Brian Fawcett, Clatskanie PUD; Gohar Shafiq, PGE; Tony Hyde; Suzie Dahl, Land Development Services Director, Columbia County; Ed Freeman, Airpark/Columbia Commerce Center; Jennifer Massey, St, Helens; Laura Dombrowski, PNGC Power; and Matt Treat, Blackbird. Robert Cromwell Consulting, LLC facilitated and supported the Taskforce.

The Taskforce adopted a formal goal for the taskforce stating:

“Establish a collaborative working environment to develop an actionable transmission expansion project to support the economic development need and goals of Columbia County and the northwestern region of Oregon.”

Over the course of the last year the taskforce has reviewed the factors impacting the development of transmission, most importantly the process by which the BPA does so on behalf of the utilities it serves, like CRPUD, WOEC and Clatskanie PUD. Over the course of these discussions, it became clear that WOEC’s future transmission needs will be modest, that Clatskanie’s transmission needs are already in the process of being met by BPA, and that the present challenge is in the central and south county area served by CRPUD.

Regional and Local Transmission

As the Taskforce came to understand, CRPUD’s high-voltage transmission connection through BPA is limited and one or more new commercial or industrial customers will consume what capacity remains available today, thereby constraining all future economic growth in the Mid to South end of Columbia County. Additional electric transfer capability is required to meet the potential requests that CRPUD has received from businesses exploring whether to locate in Columbia County. It is worth noting that BPA’s Congressional authority includes not just marketing the power from the hydroelectric dams on the Columbia river, and the transmission required to do so in service to utilities like CR PUD but is also charged with promoting economic development across the Pacific Northwest.

For several years now, CRPUD has been proactively working with BPA and PGE (both operate high-voltage transmission in the county, PGE’s through interconnection agreement with BPA, based on legacy service in the area) to identify future requirements, the potential solutions to meet those needs and develop a solution. After years of study and work by CRPUD leadership and staff, a consensus has emerged that the most cost-effective solution to supporting future economic growth in the CRPUD service territory will be to upgrade an existing BPA 115kV transmission line and increase its capacity with a replacement 230kV circuit. While PGE investing in transmission upgrades is also possible, BPA is more likely. It is worth noting and congratulating CRPUD for its leadership in piloting a transmission reform process that BPA has now adopted (“PARS”) and is rolling out across the four states it serves, as a regular part of its new transmission planning process (“LARS”).

It is important to note that this work is occurring in a regional, national and global context where post-pandemic supply chain disruptions and delays are still impacting the ability of utilities and transmission service providers like BPA to study, design and construct

transmission circuits on the timeline being sought by those businesses needing these upgrades.

Similarly, the Pacific Northwest (Oregon, Washington, Idaho and Montana) is forecast over the next decade to need an additional 9-11 gigawatts of electric power generation and the transmission required to deliver that energy to loads across the entire PNW region. A large portion, but by no means all, of that forecast demand is associated with data centers; both those that provide cloud computing (i.e. Netflix and online shopping, banking, etc.) as well as the work being done to develop generative artificial intelligence (AI) technology. Other drivers of current load forecast increases include the growth in electrification of the transportation sector with electric vehicles and the expanded use of heat-pump technology that is bringing air conditioning to homes across the region where it had never existed previously.

In response to these and other challenges, transmission providers across the nation are having to reinvent their processes and methods for studying, designing, and constructing transmission to meet this load growth that has not been seen for fifty years. In the case of BPA, it is near the end of a multi-year process of reforming all its transmission functions and that has caused it to be “on pause” for the last two years as it workshops its way to a new path forward with its transmission customers like CRPUD. BPA is now coming “off pause” and preparing to move forward with requests like CRPUD’s.

It is also worth noting that approximately 15 years ago BPA sought to develop additional transmission along the I-5 corridor to mitigate reliability challenges, in particular, during winter storm events. This effort was eventually abandoned in the face of community opposition and “non-wire solutions” were developed to defer those system reinforcements. It is becoming increasingly clear that system upgrades across the region can no longer be deferred without an unacceptable risk to reliability of service, public health and safety; in addition to the economic development that is a part of BPA’s Congressional mandate and actively sought by many of the citizens of Columbia County.

Columbia County transmission needs

As stated above, the probable solution to the county’s transmission needs involves up-rating a BPA 115kV line to 230kV. This would involve new conductors (typically a three phase circuit includes three high-voltage conductors or “wires”), taller towers to support them and provide the required ground clearance and rights-of-way (ROW) needed to safely operate higher voltage lines, as well as new substation equipment like transformers.

A significant issue that remains to be resolved in this context is how much of the cost of this up-rated circuit will be directly allocated to CRPUD and its customers and how much

will be allocated more broadly across all of BPA's system as "system improvements" that all transmission customers pay a portion of through their transmission bills. This decision will be BPA's alone to make.

A related question that was discussed by the taskforce is whether PGE's existing lines that formerly served the now decommissioned Trojan nuclear plant are available to meet the county's and CRPUD's needs. The PGE transmission lines that today provide service to the St. Helens Industrial Park are formally classified differently (due in part to the Trojan nuclear plant legacy) and are not available to third parties like CRPUD. In sum, to support future economic development in the CRPUD service territory an increase in transmission capability is required and will most likely be met by upgrading a BPA 115kV transmission line to 230kV. It will take at least three years to reconductor a 115kV circuit up to 230kV once the decision is made and funding has been secured. New easements will need to be acquired, environmental and other regulatory analyses will be required, as will Tribal consultation and engagement.

Path Forward

Additional energy supply will be required for Columbia County to position itself for future economic growth, maximize development of existing industrial zoned land (largest concentration of available and contiguous parcels in the greater Portland region), meet needs of evolving industry, and deliver the associated local, family-wage jobs. To deliver that energy supply requires new or upgraded transmission infrastructure. The elected and community leaders of Columbia County will need to work together cooperatively, avoid "territorial" disputes of the past, and not "silo" this and related conversations around the infrastructure required to sustain economic growth in this century.

If Columbia County is going to succeed in diversifying and revitalizing its economy, it will require a change in approach and a change in attitude across the citizens and the leaders they elect. "Not in my backyard" (NIMBY) and its political cousin "build absolutely nothing anywhere near anyone" (BANANA) have been a reality in American politics for the last fifty years. We are now in a period in history where change is coming at an unprecedented pace, and to be successful, the community will need to reflect on and consider changing their attitudes towards infrastructure development as well.

Many communities across the globe are expressing concern with data centers as new industrial customers of their utilities. Were such an industrial customer to seek service in Columbia County it would serve the community well to establish principles for engagement with this sub-set of potential industrial customers (aka "large loads"). It is also important to

note in this context that local utilities do not have the legal authority to “just say no” and must plan for and offer retail service to any family, business or industry that requests service.

Today, we all benefit by the investments made by past generations. Whether it is the interstate highways system, the Columbia River Power and Transmission systems, the development of industrial lands, or the internet that is now ubiquitous and increasingly wireless, the citizens of Columbia County have benefited by the investments made in the past. CRPUD’s need for additional transmission will be a test of the willingness of the communities directly impacted, and those benefited, to work together to seek a common understanding and commitment.

In addition to the need for the community to come together and decide whether the opportunity for future economic development is worth the cost of supporting new infrastructure, is the need for elected leaders, utilities and BPA to do a better job of communicating clearly and transparently the infrastructure work they are doing, why they are doing it, reasonable expectations for planning, process and delivery, and how the communities impacted by that work will benefit from it. A community that is ill informed by social media posts (whose factual accuracy may be questionable) cannot be blamed for a lack of trust if no facts or education are shared by those who possess them. This will require local governments and utilities to do a better job of educating and engaging the communities they serve. Respecting different parties’ perspectives and shaping community dialog around a shared and commonly understood set of facts will be the first step in a productive conversation about the costs and benefits of upgrading a BPA transmission line to support future economic development in the county and the family-wage jobs it will bring.

At the same time, county and local governments should be having good and hard discussions internally and externally about those factors under their control that either will support economic development or deter it. Whether it is permitting, right-of-way easements, or other matters that are within the control of local governments, it is important for everyone to examine what they do and how they do it to determine if there is a better way forward to support the common goal of economic development. Similarly, the Columbia County business community needs to identify specific requests for reform to existing regulatory processes or other, concrete, specific requests that the County and local government leadership can consider for possible reform.

Community Engagement and Next Steps

At the end of the day, energy infrastructure is about the people of Columbia County. Without it, the community will be challenged to maintain, let alone change, its current economic trajectory as a bedroom community and revitalize its ability to create good paying, family-wage jobs here.

Elected and community leaders

The Columbia County Transmission Taskforce has had a substantial and meaningful dialog around the issues impacting economic development in Columbia County with a particular emphasis on transmission needs to support future commercial and industrial growth. It's now time for that discussion to grow and include the citizens of the county and other stakeholders in this discussion. It is important in this context to consider retaining a neutral convener to facilitate this community discussion. Ideally, someone who has the trust and credibility of people across the county and is familiar with the issues impacting the county due to their being a part of this community. A facilitator who is familiar with the power industry and transmission issues would also be ideal but is less critical than being a trusted member of the community. Through a wider community dialogue, a common understanding of the need for new transmission as a facilitator of economic growth can be developed. As part of this dialogue local governments will have the opportunity to bring forward potential reforms to permitting and other requirements that would support economic development and not act as a deterrent to it. Similarly, supporting the technical work CRPUD, BPA and others will have to do in the county is a fruitful area of consideration by local governments. The county government in particular will have a significant role in the permitting, right-of-way, easement, and if necessary, condemnation proceedings that may be required.

Columbia River PUD

Similarly, and in parallel, CRPUD will need to continue to engage with BPA and PGE to refine the assessment of the need, reach agreement on the work to be done and the cost allocation for that work. Transparency, consistency and predictability will be important components in building trust with the communities that will be served by the project.

When this work is complete and a new line is energized, it is more likely than it is today that Columbia County could see new employers establishing businesses in the county and this will bring new opportunities and challenges to CRPUD as an organization. Along with increasing power supply, in particular loads greater than 9.9 aMW, CRPUD will need to contract for additional power through new agreements, likely with BPA, but potentially with other power providers to meet the needs of its new, large customers. This will require

additional skill sets within the PUD related to finance, risk management, and wholesale energy markets that may not exist within the utility today.

Next Steps for the Community

- A commitment to continuing the Taskforce's work with a locally oriented, neutral facilitator who can guide the discussion. This could be a CRPUD employee, a shared resource of the local utilities, or another consultant that is a part of the community.
- Include the wider community in engaging in these issues and help them understand that upgraded transmission is a pre-requisite for substantial new employers whose energy needs will exceed existing system capabilities.
- Build understanding around the process transmission service providers use from studies => cost allocation => siting and permitting => construction => energization.
- Grow awareness that electric utilities have an obligation to serve anyone who requests service, without discrimination, subject to their need to study and plan for the infrastructure to meet the potential customer's request for service (i.e. CRPUD cannot say "no" to a potential customer).
- Educate the community on how supply chain disruptions continue to delay projects like the one discussed here and communicate clearly if or when supply chain delays occur.
- Develop a strong consensus forged in the community about what is required to support future economic development, through deep engagement with residents, businesses, developers, as well as current and potential industrial customers.
 - This will likely mean that landowners who today see a three-phase 115kV circuit on wood poles may end up seeing a different set of towers that are taller than they see today.
 - The community will need to understand and respect that this kind of disparate impact will be required as a precondition of benefiting the entire central and south Columbia County community and enable economic development for the balance of this century.
 - This kind of holistic approach to coordination and collaboration across local governments, utilities, as well as present and future customers will be crucial to success.
- Columbia County should carefully consider what will set it apart from other communities competing with it for new, large load industrial customers. A business-friendly environment and a demonstrated track-record of working together as a community, from local governments to utilities to the community at large, would be a significant and positive differentiator for Columbia County.

- Building political support for Columbia County’s economic development in both Salem, OR and Washington, D.C. is worth considering; including supporting BPA’s on-going reforms.
- The Task Force discussion in the final meeting under Phase 1 indicated widespread support for continuing this initiative in some form. The format of “Phase 2”, the requisite facilitation role, and the next scope of work cover a wide range of related potential actions based upon the work done, and work still necessary to support achievement of the necessary transmission upgrade and related system improvements.

Next steps for Columbia River PUD

- Continuing to work with BPA through the LARS process for studying the potential solutions and determining cost allocations for the proposed expansion of the transmission service BPA provides to CRPUD.
- In the event CRPUD is allocated a substantial financial contribution for the requested system improvements, is there a potential industrial customer willing to proactively incur that cost to secure future service?
- The energy demands of new, large industrial customers that are energy intensive industries (manufacturing, fabrication, data centers and others) require skillsets not traditionally required within rural electric utilities.
- Internal staffing and related capability discussions will need to occur within CRPUD as it brings on industrial loads over 9.9 aMW which require additional power supply, risk management, accounting, and finance capability that may not exist today within CRPUD. Whether the workload is sufficient to justify increasing internal staffing, versus requesting BPA to provide the power as well as the transmission, are some of the internal discussions the current and future leadership of CRPUD will need to contend with as they move forward.
- CRPUD will also need to undergo some changes to its workforce culture to accommodate working with new, energy-intensive large loads that are going to have expectations that may be very different than their existing customer base. This may well require having “Account Executives” on staff who are responsible for managing the relationship and meeting the needs of these new large loads (and the employment they will bring to the county).

Conclusions and Recommendations

If an economic development consensus can be developed in Columbia County where the natural trade-offs inherent in the development of energy infrastructure that is required for economic growth is supported widely across the community without the divisive rhetoric occurring elsewhere, then Columbia County will have set a course for a future that will allow it to retain its best and brightest and have a more well-rounded economic structure within the county. If not, then it is very likely that the future of the central and south county will be much like its recent history or that of Clark County, i.e., a suburban residential area supporting the employment of people in Portland area. There is nothing “wrong” with Columbia County becoming a bedroom community of Portland, but it is a choice that should be taken deliberately and with careful forethought and full considerations of the consequences, and not simply as a matter of default due to a failure to invest in the infrastructure required to support current and future commercial and industrial activity.

Every decision has consequences and a decision not to make a decision is a decision, and unfortunately, is all too common in our currently fractious political environment. There are no silver bullets or single solutions. The path forward recommended by the Taskforce will require a multi-year, hard, consistent effort across the community to be successful.

Recommendations

- Have a fulsome, structured conversation in the community about the future, what is needed and reasonably attainable to support the economic development of Columbia County, with an emphasis on the transmission constraints on the lines serving the central and south county area (PARS).
 - Help increase understanding of the importance of transmission expansion to support population, communities, and future economic development of any kind.
 - Discuss the impact to industrial landowners where the BPA right of way may need to be expanded to allow for 230kV circuit(s) to replace the 115kV circuit now serving the central and south county.
 - Also acknowledge the visual impacts to others in the community of expanding transmission towers from current, wooden “H-frame” towers to taller, monopole or lattice towers.
 - Balance these impacts with the broader community benefit of job creation and supporting families in Columbia County. Sustaining and enhancing the sense of community that taskforce members highlighted over the course of this year’s discussions, of which, serving new industries was only one part.

- Acknowledge the substantial investment in land development that has already been made in both private property as well as the county's Ports and support industrial development there.
- Locally elected officials' and community leaders' engagement and alignment will be critical to success in developing additional transmission.
 - Articulate the need for increased transmission for economic development.
 - Clarify that this is required for any new, heavy commercial or industrial loads beyond those already requesting service, not just potential data centers.
 - Support Columbia River PUD and other utility/energy partners. Build political and policy advocacy capability at both state and fed levels, in doing this work.

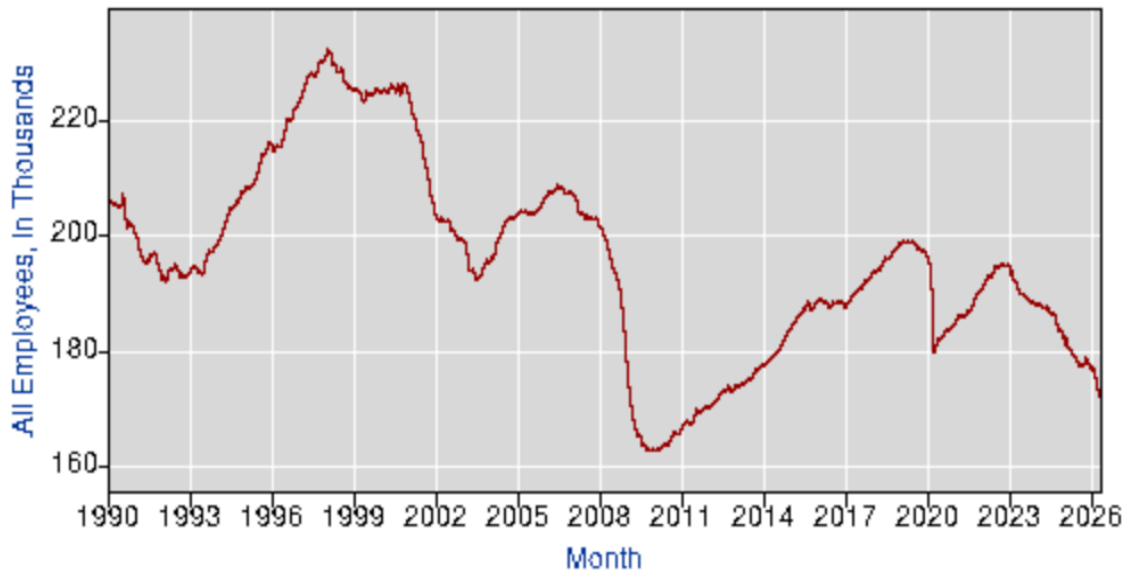
Taskforce Conclusions

- Key messages to share with the community on transmission and economic development:
 - Upgrading one of Bonneville Power Administration's 115kV transmission lines serving Columbia River PUD to a 230kV circuit is critical to future economic development in the central and south end of Columbia County.
 - This process will take years to complete and is already several years in the making due to the quiet, effective work of Columbia River PUD, Clatskanie PUD and West Oregon electric Cooperative in working with the BPA and Portland General Electric (PGE) to identify the electrical need and the potential solution. Continuing Phase 2 of this effort is crucial to successful community engagement.
- New transmission is critical to any substantial restoration and expansion of the economy of the central and south county area.

References

1. BPA Portland Area Reinforcement Study (PARS) – The utilities in Columbia County piloted an innovative study process with BPA, PGE and others. That has led to the development of the “Load Area Reinforcement Studies” (LARS) that is now launching from the pilot and continues to include Columbia River PUD forecasted 20-year load area and system reinforcement needs – See June 2026 materials here - <https://www.bpa.gov/-/media/Aep/transmission/transmission-business-model/20260615---LARS-Customer-Meeting.pdf>

2. Oregon Business and Industry's Scorecard of Oregon's competitiveness is here -
<https://oregonbusinessindustry.com/oregonscorecard-economy/>
 - a. 39th nationally in CNBC economic ranking
 - b. Employment fell while US employment grew and job loss in manufacturing was worse than the national trend. 5.2% jobless rate, higher than the US.
3. Oregon Economic and Revenue Forecast (May 20, 2026) -
<https://www.oregon.gov/das/oea/Documents/OEA-Forecast-0626.pdf>
 - a. Slowing wage growth due to softening labor conditions and uncertainty remains. They believe geopolitics and rising energy prices pose a substantial threat to the economic health of Oregon and that sustained \$150/barrel or \$5.50/gal. gasoline prices create a meaningful risk of a recession. p. 5
 - b. Manufacturing across Oregon has fluctuated for the last two decades, never fully recovered from pandemic era job losses with "... steady job declines more recently.". [Without saying Intel, they blame Intel layoffs.] p.18.
 - c. Columbia County has seen moderate (1.5-3.0%) population growth. p. 42
4. US Bureau of Labor Statistics for Columbia County, Oregon -
https://data.bls.gov/maps/cew/OR?period=2025-Q4&industry=10&geo_id=41009&chartData=3&distribution=1&pos_color=blue&neg_color=orange&showHideChart=show&ownerType=0
 - a. 1.1% or 129 FTE growth in manufacturing and industrial employment from 2024 to 2025.
 - b. 12,254 employed by industries in the county in 2025.
5. Statewide changes in employment in manufacturing from 1990 to 2025 -
<https://data.bls.gov/pdq/SurveyOutputServlet>



6. Unfortunately, Columbia County is often included in the Portland, OR-WA Area, thereby masking Columbia County's economic picture in the broader data from Portland. See - https://www.bls.gov/regions/west/summary/blssummary_portland_or_wa.pdf
7. Fulton, Ann, *The Development of Columbia County 1792-1930* (1998). <https://drive.google.com/file/d/1-OHSIH4EZq1eEgZK8gcaHW6CHF-WLBn/view>
 - a. Columbia County Oregon was created on January 16, 1854, by dividing Washington County. Chinook and Clatskanie Indian Tribes had developed extensive trading networks in the area before colonization. The first white settlers arrived in the 1840s, seeking to establish trade along the Columbia River. Logging and lumber processing were critical to the county's early development and remained the mainstay of the economy until 1930. p. 5.
 - b. This early period is characterized by "Settlement, Statehood and Steam Power" up to the 1880s. The next era was "Railroads and Industrial Growth" from 1884-1913 with mainline railroads operating in the county beginning in 1884. Columbia County is approximately 687 square miles and at 62 miles, contains the longest stretch of the Columbia River of any Oregon county. With the exception of the watershed along the Columbia the county's geography is hilly or mountainous. p. 6.
8. Columbia County History - <https://uscountyhistorybooksdirectoryandlookup.com/states/or/columbia-county-history/>, the foundation of the county's economy has been the timber industry, commercial fishing and shipping and shipbuilding during the early eras.

9. History of St. Helens, OR -

https://www.oregonencyclopedia.org/articles/st_helens/#.Wqv_SXwh3IU

- a. St. Helens Lumber and St. Helens Pulp and Paper enabled the community to survive the great depression.
- b. The timber industry remained central to the County's economics after WWII and St. Helens promoted itself as "Payroll city", reflecting the five forest products companies that called St. Helens home.
- c. The loss of the last of the old-growth forests and associated employment has left St. Helens as a net exporter of employees to other towns and cities in the Portland-metro area.

10. Wikipedia - https://en.wikipedia.org/wiki/Columbia_County,_Oregon

Acknowledgements

The author would like to acknowledge and thank the Board of Commissioners of Columbia County, the elected officials and community leaders who participated actively in the Taskforce and Business Oregon for providing a grant to fund this work on behalf of the citizens of Columbia County. Particular thanks to the Taskforce members for their time, attention, active engagement and support of this work.

Special thanks to Columbia River PUD leadership and staff for supporting this effort, providing facilities and administrative support for the Taskforce over the course of the last year.

This report was prepared with the feedback and support of the Taskforce members, but any errors or omissions are solely those of the author, for which he apologizes in advance.

Biography

Robert Cromwell acts as a consultant to a variety of energy industry companies and communities who are navigating the intersection of large load growth, power supply, and transmission. He previously served as Umatilla Electric Cooperative's Vice President of Power Supply, and in several executive roles within Seattle City Light during his quarter century in the utility industry. Western energy markets and supporting BPA in improving the service it provides its customers have been a focus during his career. Before joining Seattle City Light he spent fourteen years practicing law, including as Washington state's utility consumer advocate and representing Seattle's electric and water utilities. He and his wife reside on Bainbridge Island.